

What is claimed is:

1. An apparatus for continuously forming an FRP square pipe by molding a semi-cured prepreg material formed by impregnating a thermosetting resin in carbon fiber or glass fiber, the apparatus comprising:

a device for laminating a predetermined number of prepreg sheets sequentially on a square rod-shaped core having a release film disposed in advance on the surface thereof, the core having an outer diameter that is smaller than an inner diameter of the square pipe to be formed, and supported and fixed at one end thereof;

a device for wrapping a tape-like release film on the laminated prepreg sheets in a circumferential direction after the predetermined number of prepreg sheets are laminated;

a device for placing the release film on an outer layer of the laminated prepreg sheets;

a core disposed before a hot press and having an outer diameter that corresponds to the inner diameter of the square pipe to be formed; and

a device equipped with a hot press for providing heat and pressure to the prepreg sheets, a heating furnace for providing additional heating to the hot-pressed prepreg sheets, and a device for pulling and holding the formed prepreg square pipe.

2. The apparatus for continuously forming an FRP square pipe according to claim 1, wherein the device for wrapping on

the tape-like release film comprises a mechanism for controlling the tension placed on the tape being fed.

3. The apparatus for continuously forming an FRP square pipe according to claim 1, wherein the tape-like release film utilizes a stretch film having resistance to heat equal to or higher than the curing temperature of the prepreg material being used, and also capable of generating thermal contraction stress.

4. The apparatus for continuously forming an FRP square pipe according to claim 1, wherein the device for wrapping on the tape-like release film in the circumferential direction and the device for hot-pressing, pulling and holding the prepreg are controlled in a mutually interlocked fashion.